

## STIC Biotechnology Systems Branch

### RAW SEQUENCE LISTING ERROR REPORT

EFS

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/571,989A  
Source: FWO  
Date Processed by STIC: 3/28/07

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):  
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

## Raw Sequence Listing Error Summary

### ERROR DETECTED

### SUGGESTED CORRECTION

SERIAL NUMBER:

10/571,989A

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1      Wrapped Nucleics  
    Wrapped Aminos      The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
  
- 2      Invalid Line Length      The rules require that a line not exceed 72 characters in length. This includes white spaces.
  
- 3      Misaligned Amino  
    Numbering      The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
  
- 4      Non-ASCII      The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
  
- 5      Variable Length      Sequence(s)      contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
  
- 6      PatentIn 2.0  
    "bug"      A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s)     . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
  
- 7      Skipped Sequences  
    (OLD RULES)      Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence:  
    (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
    (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
    (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
    This sequence is intentionally skipped  
    Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
  
- 8      Skipped Sequences  
    (NEW RULES)      Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence.  
    <210> sequence id number  
    <400> sequence id number  
    000
  
- 9      Use of n's or Xaa's  
    (NEW RULES)      Use of n's and/or Xaa's have been detected in the Sequence Listing.  
    Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
    In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
  
- 10      Invalid <213>  
    Response      Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence. (see item 11 below)
  
- 11      Use of <220>      Sequence(s)      missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules
  
- 12      PatentIn 2.0  
    "bug"      Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
  
- 13      Misuse of n/Xaa      "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



IFWO

## RAW SEQUENCE LISTING

DATE: 03/28/2007

PATENT APPLICATION: US/10/571,989A

TIME: 14:54:06

Input Set : N:\efs\03\_28\_07\10571989A\_efs\clev200023ST25.txt

Output Set: N:\CRF4\03282007\J571989A.raw

3 <110> APPLICANT: Cleveland State University  
 5 <120> TITLE OF INVENTION: EXOSITE-DIRECTED THROMBIN INHIBITORS  
 7 <130> FILE REFERENCE: CLEV200023  
 9 <140> CURRENT APPLICATION NUMBER: US 10/571,989A  
 C--> 10 <141> CURRENT FILING DATE: 2006-03-13  
 12 <150> PRIOR APPLICATION NUMBER: PCT/US04/021487  
 13 <151> PRIOR FILING DATE: 2004-07-01  
 15 <150> PRIOR APPLICATION NUMBER: US 60/502186  
 16 <151> PRIOR FILING DATE: 2003-09-12  
 18 <160> NUMBER OF SEQ ID NOS: 25  
 20 <170> SOFTWARE: PatentIn version 3.2  
 22 <210> SEQ ID NO: 1  
 23 <211> LENGTH: 30  
 24 <212> TYPE: PRT  
 25 <213> ORGANISM: Homo sapiens  
 27 <400> SEQUENCE: 1  
 29 Lys Met His Asp Arg Leu Glu Pro Gln Asp Glu Glu Ser Asp Ala Asp  
 30 1 5 10 15  
 33 Tyr Asp Tyr Gln Asn Arg Leu Ala Ala Leu Gly Ile Arg  
 34 20 25 30  
 37 <210> SEQ ID NO: 2  
 38 <211> LENGTH: 10  
 39 <212> TYPE: PRT  
 40 <213> ORGANISM: Homo sapiens  
 42 <400> SEQUENCE: 2  
 44 Lys Met His Asp Arg Leu Glu Pro Glu Asp  
 45 1 5 10  
 48 <210> SEQ ID NO: 3  
 49 <211> LENGTH: 10  
 50 <212> TYPE: PRT  
 51 <213> ORGANISM: Homo sapiens  
 53 <400> SEQUENCE: 3  
 55 Leu Glu Pro Glu Asp Glu Glu Ser Asp Ala  
 56 1 5 10  
 59 <210> SEQ ID NO: 4  
 60 <211> LENGTH: 10  
 61 <212> TYPE: PRT  
 62 <213> ORGANISM: Homo sapiens  
 64 <400> SEQUENCE: 4  
 66 Glu Glu Ser Asp Ala Asp Tyr Asp Tyr Gln  
 67 1 5 10  
 70 <210> SEQ ID NO: 5  
 71 <211> LENGTH: 10

*see pp 2-4*  
 Does Not Comply  
 Corrected Diskette Needed

## RAW SEQUENCE LISTING

DATE: 03/28/2007

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TIME: 14:54:06

Input Set : N:\efs\03\_28\_07\10571989A\_efs\clev200023ST25.txt

Output Set: N:\CRF4\03282007\J571989A.raw

72 <212> TYPE: PRT  
73 <213> ORGANISM: Homo sapiens  
75 <400> SEQUENCE: 5  
77 Asp Tyr Asp Tyr Gln Asn Arg Leu Ala Ala  
78 1 5 10  
81 <210> SEQ ID NO: 6  
82 <211> LENGTH: 10  
83 <212> TYPE: PRT  
84 <213> ORGANISM: Homo sapiens  
86 <400> SEQUENCE: 6  
88 Asn Arg Leu Ala Ala Leu Gly Ile Arg  
89 1 5 10  
92 <210> SEQ ID NO: 7  
93 <211> LENGTH: 5  
94 <212> TYPE: PRT  
95 <213> ORGANISM: Artificial  
97 <220> FEATURE:  
98 <223> OTHER INFORMATION: chemically synthesized  
100 <400> SEQUENCE: 7  
102 Asp Tyr Asp Tyr Gln  
103 1 5  
106 <210> SEQ ID NO: 8  
107 <211> LENGTH: 5  
108 <212> TYPE: PRT  
109 <213> ORGANISM: Artificial  
111 <220> FEATURE:  
112 <223> OTHER INFORMATION: TYR AT SEQUENCE LOCATION 4 IS SULFONATED (-SO3-2)  
114 <400> SEQUENCE: 8  
116 Asp Tyr Asp Tyr Gln  
117 1 5  
120 <210> SEQ ID NO: 9  
121 <211> LENGTH: 5  
122 <212> TYPE: PRT  
123 <213> ORGANISM: Artificial  
125 <220> FEATURE:  
126 <223> OTHER INFORMATION: TYR AT SEQUENCE LOCATIONS 2 AND 4 ARE SULFONATED (-SO3-2)  
128 <400> SEQUENCE: 9  
130 Asp Tyr Asp Tyr Gln  
131 1 5  
134 <210> SEQ ID NO: 10  
135 <211> LENGTH: 4  
136 <212> TYPE: PRT  
137 <213> ORGANISM: Homo sapiens  
139 <400> SEQUENCE: 10  
141 Asp Tyr Asp Tyr  
142 1  
145 <210> SEQ ID NO: 11  
146 <211> LENGTH: 5  
147 <212> TYPE: PRT

*this may explain Tyr, but it does not explain*  
*↓*  
*Artificial Sequence*  
*(see item 11 on Error Summary sheet)*  
*same error*

## RAW SEQUENCE LISTING

DATE: 03/28/2007

PATENT APPLICATION: US/10/571,989A

TIME: 14:54:06

Input Set : N:\efs\03\_28\_07\10571989A\_efs\cleve200023ST25.txt

Output Set: N:\CRF4\03282007\J571989A.raw

148 <213> ORGANISM: Homo sapiens  
 150 <400> SEQUENCE: 11  
 152 Asp Tyr Asp Tyr Gln  
 153 1 5  
 156 <210> SEQ ID NO: 12  
 157 <211> LENGTH: 4  
 158 <212> TYPE: PRT  
 159 <213> ORGANISM: Artificial *same lva*  
 161 <220> FEATURE:  
 162 <223> OTHER INFORMATION: TYR AT SEQUENCE LOCATION 2 IS SULFONATED (-SO3-2)  
 164 <400> SEQUENCE: 12  
 166 Asp Tyr Asp Tyr  
 167 1  
 170 <210> SEQ ID NO: 13  
 171 <211> LENGTH: 4  
 172 <212> TYPE: PRT  
 173 <213> ORGANISM: Artificial *same*  
 175 <220> FEATURE:  
 176 <223> OTHER INFORMATION: TYR AT SEQUENCE LOCATION 4 IS SULFONATED (-SO3-2)  
 178 <400> SEQUENCE: 13  
 180 Asp Tyr Asp Tyr  
 181 1  
 184 <210> SEQ ID NO: 14  
 185 <211> LENGTH: 4  
 186 <212> TYPE: PRT  
 187 <213> ORGANISM: Artificial *same*  
 189 <220> FEATURE:  
 190 <223> OTHER INFORMATION: TYR AT SEQUENCE LOCATIONS 2 AND 4 ARE SULFONATED (-SO3-2)  
 192 <400> SEQUENCE: 14  
 194 Asp Tyr Asp Tyr  
 195 1  
 198 <210> SEQ ID NO: 15  
 199 <211> LENGTH: 23  
 200 <212> TYPE: DNA  
 201 <213> ORGANISM: Homo sapiens  
 203 <400> SEQUENCE: 15  
 204 gagtgatgct aagtttgatt acc 23  
 207 <210> SEQ ID NO: 16  
 208 <211> LENGTH: 23  
 209 <212> TYPE: DNA  
 210 <213> ORGANISM: Homo sapiens  
 212 <400> SEQUENCE: 16  
 213 ggtaaatcaaa ctttagcatca etc 23  
 216 <210> SEQ ID NO: 17  
 217 <211> LENGTH: 18  
 218 <212> TYPE: DNA  
 219 <213> ORGANISM: Homo sapiens  
 221 <400> SEQUENCE: 17  
 222 catggagtga ccttctcg 18

## RAW SEQUENCE LISTING

DATE: 03/28/2007

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Input Set : N:\efs\03\_28\_07\10571989A\_efs\cleve200023ST25.txt

Output Set: N:\CRF4\03282007\J571989A.raw

```

225 <210> SEQ ID NO: 18
226 <211> LENGTH: 15
227 <212> TYPE: DNA
228 <213> ORGANISM: Homo sapiens
230 <400> SEQUENCE: 18
231 tcatccagga gaacc 15
234 <210> SEQ ID NO: 19
235 <211> LENGTH: 28
236 <212> TYPE: DNA
237 <213> ORGANISM: Homo sapiens
239 <400> SEQUENCE: 19
240 gctaagttta agttccagaa cagactgg 28
243 <210> SEQ ID NO: 20
244 <211> LENGTH: 28
245 <212> TYPE: DNA
246 <213> ORGANISM: Homo sapiens
248 <400> SEQUENCE: 20
249 ccagtcctgtt ctggaactta aacttagc 28
252 <210> SEQ ID NO: 21
253 <211> LENGTH: 13
254 <212> TYPE: PRT
255 <213> ORGANISM: Artificial
257 <220> FEATURE:
258 <223> OTHER INFORMATION: NO COMMENT
260 <400> SEQUENCE: 21
262 Asp Tyr Gln Asn Arg Leu Ala Ala Ala Leu Gly Ile Arg
263 1 5 10
266 <210> SEQ ID NO: 22
267 <211> LENGTH: 15
268 <212> TYPE: PRT
269 <213> ORGANISM: Artificial
271 <220> FEATURE:
272 <223> OTHER INFORMATION: NO COMMENT
274 <400> SEQUENCE: 22
276 Pro Val Ile Pro Ala Asn Met Asp Lys Lys Tyr Arg Ser Gln His
277 1 5 10 15
280 <210> SEQ ID NO: 23
281 <211> LENGTH: 42
282 <212> TYPE: PRT
283 <213> ORGANISM: Homo sapiens
285 <400> SEQUENCE: 23
287 Asn Leu Lys Lys Ile Thr Arg Glu Gln Arg Arg His Met Lys Arg Trp
288 1 5 10 15
291 Glu Tyr Phe Ile Ala Ala Glu Glu Val Ile Trp Asp Tyr Ala Pro Val
292 20 25 30
295 Ile Pro Ala Asn Met Asp Lys Lys Tyr Arg
296 35 40
299 <210> SEQ ID NO: 24
300 <211> LENGTH: 9

```

*Invalid. Artificial  
Sequences must be explained  
(see item 11 on Error  
Summary Sheet)*

## RAW SEQUENCE LISTING

DATE: 03/28/2007

PATENT APPLICATION: US/10/571,989A

TIME: 14:54:06

Input Set : N:\efs\03\_28\_07\10571989A\_efs\cleve200023ST25.txt

Output Set: N:\CRF4\03282007\J571989A.raw

301 <212> TYPE: PRT  
302 <213> ORGANISM: Homo sapiens  
304 <400> SEQUENCE: 24  
306 Glu Tyr Phe Ile Ala Ala Glu Glu Val  
307 1 5  
310 <210> SEQ ID NO: 25  
311 <211> LENGTH: 5  
312 <212> TYPE: PRT  
313 <213> ORGANISM: Homo sapiens  
315 <400> SEQUENCE: 25  
317 Glu Tyr Phe Ile Ala  
318 1 5

RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 03/28/2007  
PATENT APPLICATION:    US/10/571,989A      TIME: 14:54:07

Input Set : N:\efs\03\_28\_07\10571989A\_efs\clev200023ST25.txt  
Output Set: N:\CRF4\03282007\J571989A.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:7,8,9,12,13,14,21,22



**VERIFICATION SUMMARY**

DATE: 03/28/2007

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TIME: 14:54:07

Input Set : N:\efs\03\_28\_07\10571989A\_efs\clev200023ST25.txt

Output Set: N:\CRF4\03282007\J571989A.raw

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date